

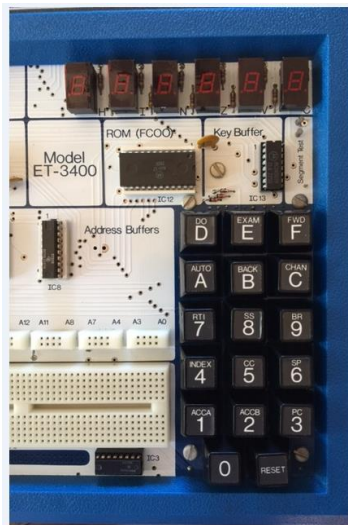
Heathkit ET-3400 Microcomputer Learning System

Motorola 6800 Microprocessor Evaluation Board from the Late 70's
Simple Assembly Program Demonstration

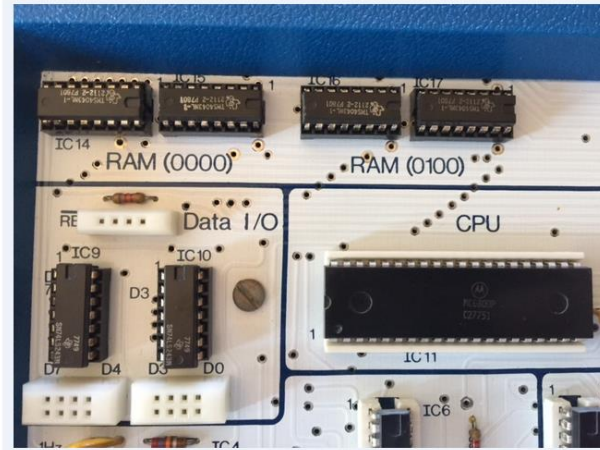
The ET-3400 is an educational trainer from 1977. It is based on the Motorola MC6800 CPU. It came with a whopping 256 bytes of RAM (expandable to 512 bytes) and a 1K on-board ROM monitor program. The Trainer was sold by the Heath Company (Benton Harbor, Michigan) as a kit (\$190), or factory assembled (\$240).



Heathkit ET-3400



Input: Hex Keypad; Output six 7-segment displays



RAM \$0000-\$01FF (512 bytes)

The following describes the loading and execution of a simple assembly program that loads ACCA with \$01 and ACCB with \$0F, adds the two numbers in ACCA and saves the result (\$01) at \$00FF.

Assembly program:

```
LDAA #$01
LDAB #$0F
ABA
STAA $FF
SWI
```

Machine code (in Hex)

```
86, 01, C6, 0F, 1B, 97, FF, 3F
```

Loading the program into Trainer memory

```
RESET, AUTO, 0000, 86, 01, C6, 0F, 1B, 97, FF, 3F
```

Executing the program

```
RESET, DO, 0000
```

Reading result

```
EXAM, 00FF
```

Watch Video: <http://youtu.be/Di3HnM-Q3f0>